

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,152	02/27/2004	Motokazu Yasui	43780.011401	8994
22850	7590 03/23/2006		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			NGUYEN, ANTHONY H	
1940 DUKE S ALEXANDR	IA, VA 22314		ART UNIT PAPER NUMBER	
	•		2854	
		-	DATE MAIL ED: 02/22/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
		10/789;152	YASUI ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Anthony H. Nguyen	2854	
Period fo	The MAILING DATE of this communication	on appears on the cover sheet w	with the correspondence address	s
A SH WHIC - Exte after - If NC - Failu Any	IORTENED STATUTORY PERIOD FOR FOR INCHEVER IS LONGER, FROM THE MAILING ensions of time may be available under the provisions of 37 of SIX (6) MONTHS from the mailing date of this communication of the period for reply is specified above, the maximum statutory ure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the led patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUN CFR 1.136(a). In no event, however, may a ion. period will apply and will expire SIX (6) MO y statute, cause the application to become y	NICATION.  a reply be timely filed  DNTHS from the mailing date of this commur  ABANDONED (35 U.S.C. § 133).	
Status				
1)⊠ 2a)□ 3)□	This action is <b>FINAL</b> . 2b)∑	This action is non-final.  Ilowance except for formal ma	• •	rits is
Disposit	ion of Claims			
5)□ 6)⊠ 7)□ 8)□ <b>Applicat</b> 9)□ 10)□	Claim(s) 1-4 is/are pending in the applicated 4a) Of the above claim(s) is/are with Claim(s) is/are allowed.  Claim(s) 1-4 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction at a subject to restriction at a subject to by the Example of the drawing(s) filed on is/are: a)  Applicant may not request that any objection of the cast of the oath or declaration is objected to by the cast of the oath or declaration is objected to be objected	thdrawn from consideration.  and/or election requirement.  aminer.  accepted or b) objected to the drawing(s) be held in abeys	ance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR 1.	• •
Priority (	under 35 U.S.C. § 119			
12)□ a)	Acknowledgment is made of a claim for for All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International Esee the attached detailed Office action for	uments have been received.  uments have been received in e priority documents have bee  Bureau (PCT Rule 17.2(a)).	Application No on received in this National Stag	je
2) 🔲 Notio 3) 🔯 Infor	ot(s)  Dee of References Cited (PTO-892)  Dee of Draftsperson's Patent Drawing Review (PTO-94  The mation Disclosure Statement(s) (PTO-1449 or PTO/84  The No(s)/Mail Date 2/14/2006.	48) Paper No	v Summary (PTO-413) o(s)/Mail Date f Informal Patent Application (PTO-152) 	)

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 14, 2006 has been entered.

## Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Konishi (JP 05-131696) in view of Onizuka et al. (JP-2879872).

Konishi teaches an ink jet printer having a housing 1, an ink jet recording head 8 for printing on two sides of a record sheet (P) and a sheet feeding mechanism 6, 10 and 12 which feeds a portion of a printed sheet to a location outside or a sheet output tray 11 and feeds the sheet back into the housing for printing the other side of the sheet via a re-feeding path 13 as shown in Fig.1 of Konishi. Konishi does not teach the controller congfigured to control the sheet feeding mechanism for maintaining or delaying the feeding of the recording sheet for a

Art Unit: 2854

predetermined time period to allow the ink drops printed on the first side of the sheet to dry before printing on the second side. Onizuka et al. teaches an inkjet recording apparatus having a controller 30 (Fig.7 of Onizuka et al.) which controls the sheet feeding mechanism so that the sheet is maintained or delayed in feeding a predetermined time period to allow the ink drops printed on the first side to dry before printing on the second side of the sheet (Onizuka et al., Fig.8 and pages 13 and 14, the paragraphs [0033] and [0034]). In view of the teaching of Onizuka et al., it would have been obvious to one of ordinary skill in the art to modify the inkjet recording apparatus of Konishi by providing the controller which keeps the sheet which is printed on the first side for a predetermined time period to dry the ink before printing the second side as taught by Onizuka et al. for optimizing the print quality on the sides of a sheet.

Claims 3 and 4 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Konishi (JP 05-131696) in view of Onizuka et al. (JP-2879872) and Goto et al. (US 5,225,881).

Konishi teaches an ink jet printer having a housing 1, an ink jet recording head 8 for printing on two sides of a record sheet (P) and a sheet feeding mechanism 6, 10 and 12 which feeds a portion of a printed sheet to a location outside or a sheet output tray 11 and feeds the sheet back into the housing for printing the other side of the sheet via a re-feeding path 13 as shown in Fig.1 of Konishi. Konishi does not teach the second sheet ejection path having a switchback mechanism and the controller congfigured to control the sheet feeding mechanism for maintaining or delaying the feeding of the recording sheet for a predetermined time period to allow the ink drops printed on the first side of the sheet to dry before printing on the second side. Goto et al. teaches an image recording apparatus having a housing 100 (Goto et al., Fig.2), a paper source or an input cassette or tray 4a, a sheet transportation path having transport rollers 6a,7a,8,9, a first sheet ejection path 10 including ejection rollers (no numeral reference) and a first sheet diverting mechanism 12 configured for diverting the printed sheet to the first ejection

Application/Control Number: 10/789,152 Page 4

Art Unit: 2854

path, a second sheet ejection path 13a having a switchback mechanism 35a, 35b (Goto et al., Figs.5-8), or 62 (Goto et al., Figs.11-13c) including the second sheet diverting mechanism 14c,14d,14e positioned in the second sheet ejection path for directing the recording sheet to an image recording station 3. Onizuka et al. teaches an inkjet recording apparatus having a controller 30 (Fig.7 of Onizuka et al.) which controls the sheet feeding mechanism so that the sheet is maintained or delayed in feeding a predetermined time period to allow the ink drops printed on the first side to dry before printing on the second side of the sheet (Onizuka et al., Fig.8 and pages 13 and 14, the paragraphs [0033] and [0034]). In view of the teachings of Goto et al. and Onizuka et al., it would have been obvious to one of ordinary skill in the art to modify the inkjet recording apparatus of Konishi by providing the second sheet ejection path as taught by Goto et al. and the controller which keeps the sheet which is printed on the first side for a predetermined time period to dry the ink on the first side before printing the second side as taught by Onizuka et al. for quickly feeding the one side printed sheet to the print head for printing the other side.

## Response to Arguments

Applicants' arguments filed on December 1, 2005 have been fully considered but they are not persuasive in view of the new ground(s) of rejections.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169.

Application/Control Number: 10/789,152

Art Unit: 2854

The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168.

The fax phone number for this Group is (571) 273-8300.

Euthony Nguyen

Anthony Nguyen

3/18/06

Patent Examiner

Technology Center 2800